# Winter 2013-14 Outlook Summer 2014 Preview

Mark O'Malley
Gary Woodall
National Weather Service
Phoenix, AZ
www.weather.gov/phoenix

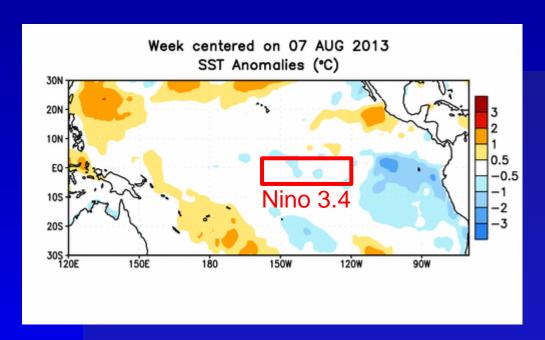


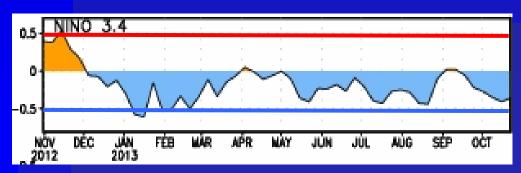


#### Arizona Winter Impacts

- El Nino winters...
  - Mild/cool temperatures, usually wetter than normal
- La Nina winters...
  - Warm temperatures, drier than normal
- Neutral winters...
  - Near normal temperatures overall, varying amounts of precip (other factors in play)
- Pacific Decadal Oscillation
  - "Warm phase" enhances precip chances
  - "Cold phase" decreases precip chances

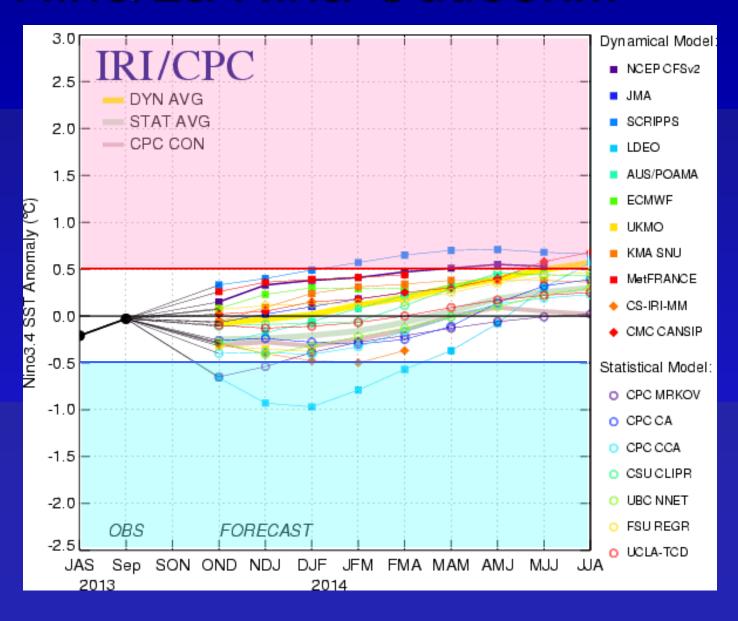
### Conditions in Tropical Pacific





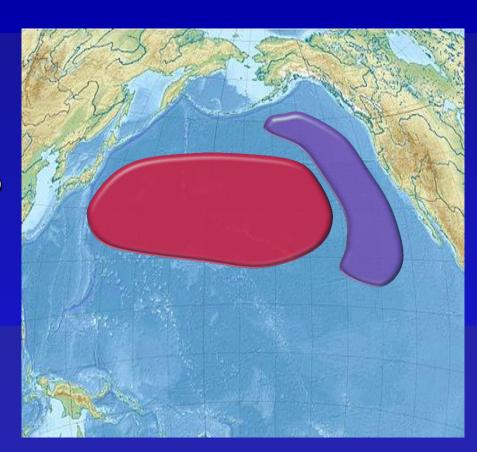
- Small, weak areas of cooler-than-normal water in central tropical Pacific
- Not large or persistent enough to be a "La Nina"
- Over time, this area has been in the "cool" portion of neutral since December 2012

#### El Nino/La Nina Outlook...

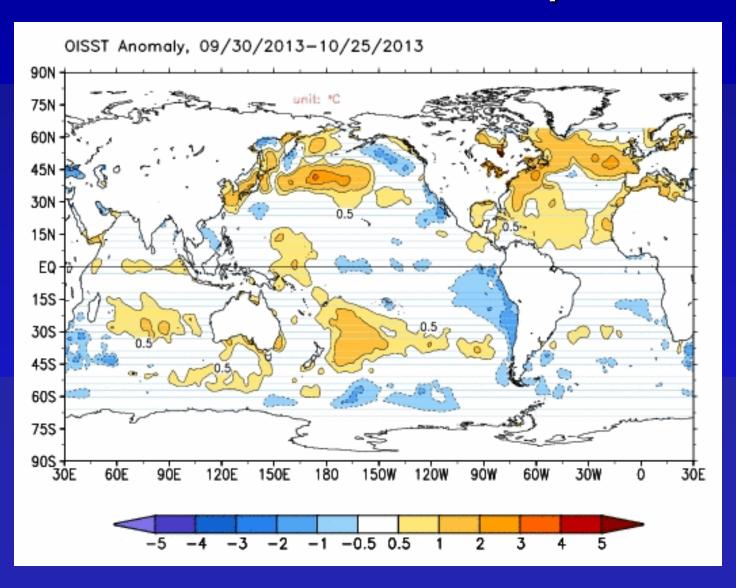


# OK, So El Nino and La Nina are no Help...

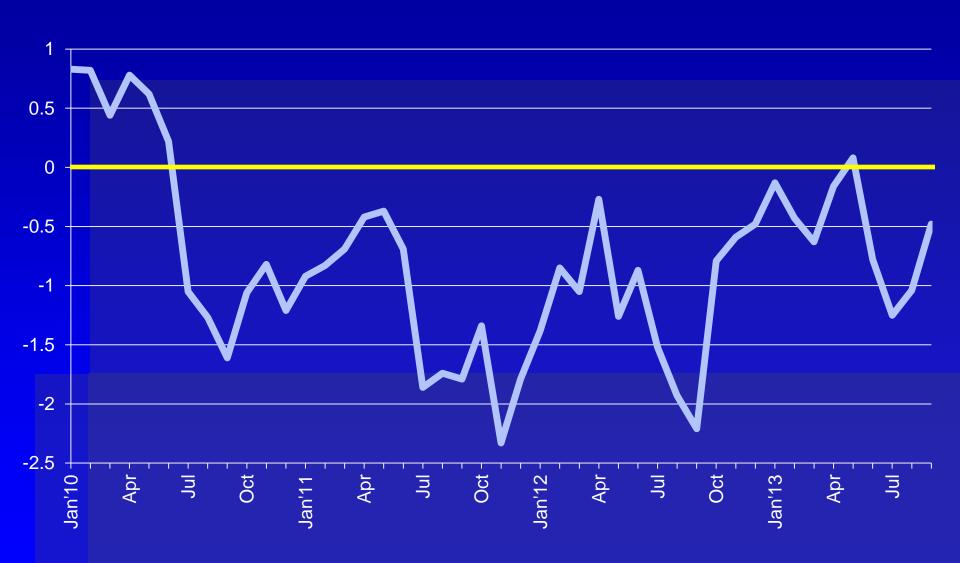
- Pacific Decadal Oscillation:
   Long-term oscillation in north
   Pacific sea surface temps
- Can affect temperature/precip patterns *IF* there is no signal from El Nino or La Nina
- Warm (positive) phase: enhanced precip in AZ
- Cool (negative) phase: diminished precip in AZ



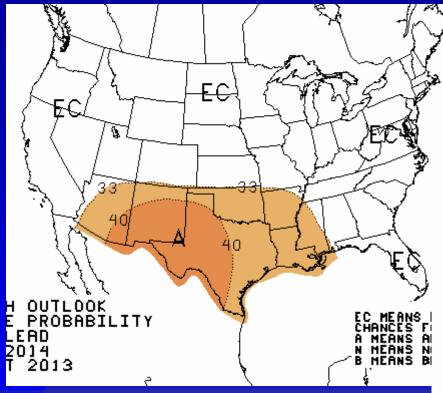
### Latest Ocean Sfc. Temperatures



#### Recent PDO Values



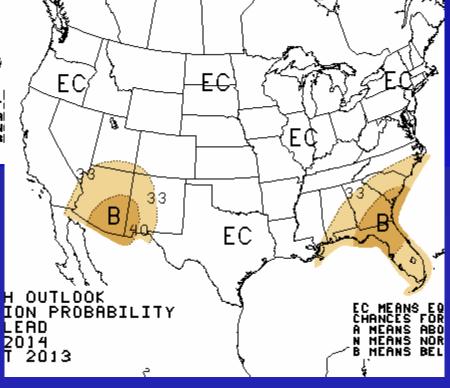
#### Outlook: Jan/Feb/Mar 2014



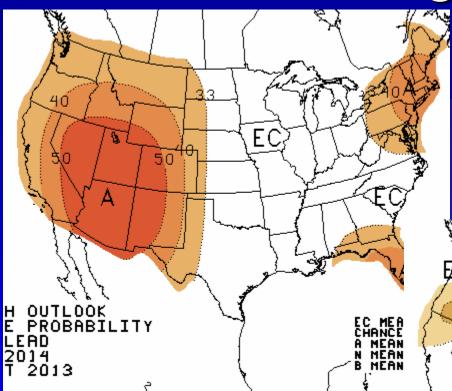
Slight favoring of abovenormal temps most of AZ

Slight favoring of belownormal precipitation Three-month averages

Shading indicates chances of above/below normal



## Outlook: Jul/Aug/Sep 2014

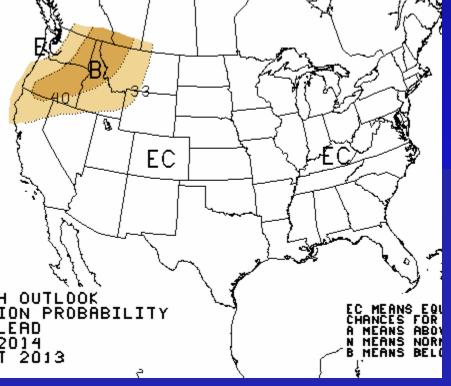


Three-month averages

Shading indicates chances of above/below normal

Temp outlook consistent with previous summers

No substantial odds for precipitation



#### Summary

- The outlook for winter 2013-14 suggests little
   El Nino/La Nina influence, negative PDO may affect precip
- Slight odds for above-normal temps, belownormal precip this coming winter
- During summer/warm season, large-scale signals have less effect on Arizona's weather
- The 2014 summer outlook's odds favor above-normal temps, no favorite for precip

#### Questions? Contact us!

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Twitter: www.twitter.com/NWSPhoenix

E-mail: gary.woodall@noaa.gov mark.omalley@noaa.gov

"Remember, we're not production, we're just in marketing!"